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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/683,736	10/10/2003	Jiten Chatterj	HES 2003-IP-011658U1	2804
28857	7590	10/14/2004	EXAMINER	
CRAIG W. RODDY HALLIBURTON ENERGY SERVICES P.O. BOX 1431 DUNCAN, OK 73536-0440			SUCHFIELD, GEORGE A	
			ART UNIT	PAPER NUMBER
			3672	

DATE MAILED: 10/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/683,736	Applicant(s) CHATTERJ ET AL.	
	Examiner George Suchfield	Art Unit 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 October 2003.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-47 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-27, 29-32 and 34-47 is/are allowed.
- 6) ☒ Claim(s) 28 and 33 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/10/03</u> | 6) <input type="checkbox"/> Other: _____  |

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 28 and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 28 is deemed indefinite with respect to the recitation in lines 2 and 3 of "an alkyl or alkene amidopropyl betaene surfactant" insofar as it is not clear what comprises "betaene", or if such compound exists.

Claim 34 recites the limitation "said fluid loss control additive" in line 1. There is insufficient antecedent basis for this limitation in the claim.

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited references disclose methods of cementing a well or subterranean zone(s), including the use of exemplary cementing slurries, which may comprise mixtures of fine and coarse grade cement, foaming agents and an inert gas for providing a foamed cementing slurry, as well as other additives, such as fluid loss control agents.

4. The following is a statement of reasons for the indication of allowable subject matter:

The primary reason for the "allowance" of the claims 1-47 is that none of the references cited, taken either singly or in combination, teach or disclose a method of cementing in a subterranean zone, as set forth in the claimed combinations, including the use of a hydroxyamine additive in the cementing slurry, as specifically recited in, e.g. claim 1, wherein the hydroxyamine additive is "selected from the group consisting of tris(isopropanol)amine ... N,N-

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bis(2-hydroxypropyl)ethanolamine". In this regard, it is noted that references to Cheung et al (6,048,393) and Myers et al (4,990,190) disclose the use of a hydroxyamine as a cement additive, however, the resulting cement is not used for cementing a subterranean zone and appears to necessitate use of an air detrainer additive and/or provide a set cement of increased porosity. The methods of cementing a well or subterranean zone, such as Onan et al (5,696,059), Vijn et al (5,588,488), Mehta et al (5,968,255) and Chatterji et al (6,220,354) provide for emplacement of well cements having enhanced compressive strength upon setting through the use of additives in the cementing slurry comprising particulate silica, a styrene/butadiene aqueous latex, an iron chloride component, and hydrophilic fibers, respectively.


5. Claims 28 and 34 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.
6. Claims 1-27, 29-33 and 35-47 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Suchfield whose telephone number is 703-308-2152. The examiner can normally be reached on M-F (6:30 - 3:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Bagnell can be reached on 703-308-2151. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
George Suchfield  
Primary Examiner  
Art Unit 3672

Gs  
September 30, 2004